KRAMER ELECTRONICS, Ltd.
www.kramerelectronics.com

VP-28

14−Input Multi−Format Presentation Switcher with Stereo Audio

HDTV COMPATIBLE

Compatible with HDTV component video signals when used with a breakout cable such as the Kramer C-GM/3RVF.

The VP−28 is a high−performance multi−format presentation switcher for composite video, HDMI, DVI, DisplayPort, computer graphics video and stereo audio and micrphone signals. The unit operates as a a 3x1 composite video, 3x1 HDMI, 3x1 computer graphics video, 3x1 DVI−I, & 2x1 DisplayPort switcher, each with unbalanced stereo audio.

FEATURES

- Max. Data Rate - 6.75Gbps (2.25Gbps per graphic channel) (HDMI & DVI).
- HDTV Compatible.
- HDCP Compliant.
- Audio Level Memory - Remembers and returns to the last audio level setting during switching.
- Condenser or Dynamic Microphone - Button selectable.
- Microphone & Audio Mixing - Input selectable master audio output.
- Mic Talkover - Mutes master audio output when mic signal is sensed.
- Level Controls - Master audio output, microphone input.
- Flexible Control Options - Front panel, RS−232, Ethernet & IR (included).
- Front Panel Control Lockout.
- Worldwide Power Supply - 100−240V AC.
- Accessory - DVI to DVI and VGA breakout cable (included).
- Standard 19” Rack Mount Size - 1U. Rack “ears” included.

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TECHNICAL SPECIFICATIONS

VIDEO INPUTS:	3 composite video on RCA connectors, 3 HDMI connectors, 2 DisplayPort connectors, 3 PC/DVI on DVI connectors.
AUDIO INPUTS:	1 mic on an XLR connector, 1 mic on a 6.3mm phone jack connector (3mV/10kW condenser/dynamic), 3 CV, 3HDMI, 2 DP, 3 PC audio, 3 DVI, all unbalanced stereo audio on 3.5mm mini jack connectors.
VIDEO OUTPUTS:	1 composite video on an RCA connector, 1 HDMI connector, 1 DisplayPort connector, 1 PC/DVI on a DVI connector.
AUDIO OUTPUTS:	1 CV, 1 HDMI, 1 DP, 1 PC audio, 1 DVI, all unbalanced stereo audio on a 3.5mm mini jack connectors; 1 master balanced stereo audio on a 5−pin terminal block.
MAX. OUTPUT LEVEL:	Video: CV: 1.7Vpp, XGA: 2.3Vpp; Audio: Master: 17Vpp from mic, 12.4Vpp from line in, Local outputs: 8.8Vpp from line inputs.
BANDWIDTH (-3dB):	Video: CV: 680MHz, XGA: 290MHz (–4dB 400MHz); Audio: >25kHz.
DIFF. GAIN:	Video: CV: 2.5%, XGA: 0.1%.
DIFF. PHASE:	CV: 0.4Deg, XGA: 0.1Deg.
K-FACTOR:	CV: <0.05%, XGA: <0.05%.
S/N RATIO:	Video: CV: 74dB, XGA: 71dB @5MHz; Audio: Master: 81dB from mic (@20mVpp input, 17Vpp output diff, “A” weighting, XLR microphone), 90 to 95dB from line in (“A” weighting), Local outputs: 110dB (“A” weighting).
CROSSTALK @1kHz (all hostile):	Video: CV: –54dB, XGA: –56dB (5MHz); Audio: Master: –70dB, Local outputs: –80dB from line in.
CONTROLS (Level Range):	MASTER: <–12 to 70dB from mic, –79 to +15dB from line in.
COUPLING:	Video: CV: DC, XGA: DC; Audio: AC.
AUDIO THD + NOISE:	Master: 0.4% from mic, 0.02% from line in (“A” weighting); Local outputs: 0.04% from line in.
AUDIO 2nd HARMONIC:	Master: 0.03% from mic, 0.01% from line in; Local outputs: 0.02%.
COMPLIANCE WITH HDCP STANDARD:	Supports HDCP.
MAXIMUM BANDWIDTH DP TO HDMI:	One or two lane (1.65Gbps per lane).
INDICATOR LEDs:	IR.
POWER CONSUMPTION:	90–264V AC, 23VA.
OPERATING TEMPERATURE:	0° to +40°C (32° to 104°F).
STORAGE TEMPERATURE:	−40° to +70°C (−40° to 158°F).
HUMIDITY:	10% to 90%, RHL non−condensing.
DIMENSIONS:	19” x 7.35” x 1U (W, D, H) rack mountable.
WEIGHT:	1.8kg (3.97lbs) approx.
INCLUDED ACCESSORIES:	Power cord, rack “ears”, Kramer infrared remote control transmitter, Kramer ADC−DM/DF+GF DVI to DVI and VGA breakout cable.
OPTIONS:	Kramer C−MDMA/MGMA DVI/VGA/audio breakout cable.